

SOME PROPOSALS FOR THE METHODICS EFFICACY IMPROVEMENT CONCERNING ENDURANCE RUNNING IN PHYSICAL EDUCATION

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Abstract:

Owing to many positive influences, education for a healthy way of living almost cannot be imagined without running or some other aerobic endurance activities in nature (mountaineering, cross-country skiing, cycling, etc.).

Physical education has without doubt an extremely important role in the formation of person's attitudes towards a particular sport activity. Today, endurance running and other endurance, from the point of energy, more demanding activities are not especially popular in physical education at schools.

The objective of the research was to find out which are the most important reasons for the rejection of endurance running at school by the young and to propose some forms and methods of pedagogical actions that would bring endurance running closer to the young person.

On the basis of the answers of 290 students in the first academic year at the Faculty of Sport in Ljubljana the following has been established: (1.) The young dislike running above all due to exertion, monotony and the fact that they cannot see any sense in running. (2.) The attitude towards running in the young at school is associated with: (a) choice of the environment in which running is carried out within physical education, (b) the persuasive power of the physical educators - his or her procedures for raising the awareness and personal example, (c) the transparency of the training programme and the systematics in carrying it out.

Key words: physical education, endurance running, pedagogical actions, motivation

EINIGE VORSCHLÄGE ZUR VERBESSERUNG METHODISCHER EFFIZIENZ DES AUSDAUERLAUFENS IN DEN SPORTSTUNDEN

Zusammenfassung:

Dank vielen positiven Einflüssen kann die Erziehung zum gesunden Lebensstil ohne das Laufen oder eine andere aerobe Ausdaueraktivität in der Natur (Wandern, Skilanglauf, Radfahren) kaum vorgestellt werden.

Zweifellos hat die Sporterziehung eine besonders wichtige Rolle in der Formung der Stellungnahme zur bestimmten sportlichen Tätigkeit. Heutzutage sind das Ausdauerlaufen, sowie andere Ausdaueraktivitäten (d.h. mehr Energie fordernde Aktivitäten), in den Schulsportstunden nicht sehr beliebt.

Das Ziel dieser Studie war, die wichtigsten Gründe festzustellen, warum junge Leute das Ausdauerlaufen in der Schule ablehnen, sowie einige Formen und pädagogische Methoden zu merken, die das Ausdauerlaufen jungen Leuten beliebt machen konnten.

Aus den Antworten von 290 Studenten ersten Jahres der Fakultät für Körperkultur wurden folgende Feststellungen gezogen: 1. Junge Leute verachten das Laufen vor allem deswegen, da sie es erschöpfend, monoton, und sinnlos finden. 2. Die Stellungnahme der Schüler zum Laufen ist mit folgenden Elementen bezogen: a) mit dem Auswahl der Umgebung für das Laufentraining in den Sportstunden b) mit der Überzeugungskraft des Sportlehrers, seinen Methoden zur Bewusstseinsregung und seinem persönlichen Beispiel, c) mit dem transparenten Trainingsprogramm und dessen systematischer Durchführung.

Schlüsselwörter: Sporterziehung, Ausdauerlaufen, pädagogische Tätigkeiten, Motivation

Introduction

Education for a healthy way of living - for a life with a regular sport activity - is without doubt one of the most important roles of sports or physical education. Due to a wide spectrum of positive health and psychosocial effects, endurance running and other outdoor aerobic sport activities in nature have become, as activities for all periods of life, one of the most important factors of the sports culture of a

person and his/her healthy and fulfilled life (Haywood, 1991; Žmuc-Tomori, 1986; Turk, 1999).

However, many years of stagnation or decline in the performance of children in the endurance tests in Slovenia (Kondrič and Šajber, 1997; Strel et al., 1995; Škof, 1991) and also in the countries of the Western Europe and the USA (Rychtecky et al., 1996; Luepker, 1999) point out, above all, that the scope of physical activity declines in general among the

young and that there are no endurance contents in physical education either at school or in leisure time, or, if these do exist they are not sufficient to have an adequate educational effect and influence on the suitable development of psychophysical abilities.

Endurance running is not especially popular among the young (Šturm et al., 1987; Škof, 1996; Škof and Dolenc, 1998). Although they generally know and are aware of its positive effects, they often refuse it, feel afraid of it and have an aversion to it. In addition to objective reasons (the possibility to choose among more attractive - more modern sports contents, unwillingness to endure exertion, bad examples in the family environment, etc.), the reasons most likely lie also in the unsuitable teaching methodology-insufficiently thought out motivational strategies etc.

The objective of the research was to establish which are the most important reasons for the rejection of endurance running at school by the young and to present the forms and methods of pedagogical actions that would bring endurance running closer to the young person so that it would become a more popular and a more interesting constituent of the programmes of physical education in schools.

Methods

The sample of the surveyed subjects consisted of 290 students in the first academic year at the Faculty of Sport in Ljubljana. In the first week of their studies at the Faculty of Sport (generations: 1996/97 and 1997/98) they filled in a questionnaire. A survey questionnaire of an exploratory type was used. It covered 26 questions (5 questions of an open type and 21 questions of a closed type) on the opinions and experiences in connection with endurance running in school physical education at the primary and secondary school level. The data were processed by means of the statistical computer program package SPSS. Basic statistical parameters, namely, the frequency distribution and percentages, were calculated for all variables. To find the relations between the variables, χ^2 was used.

Results

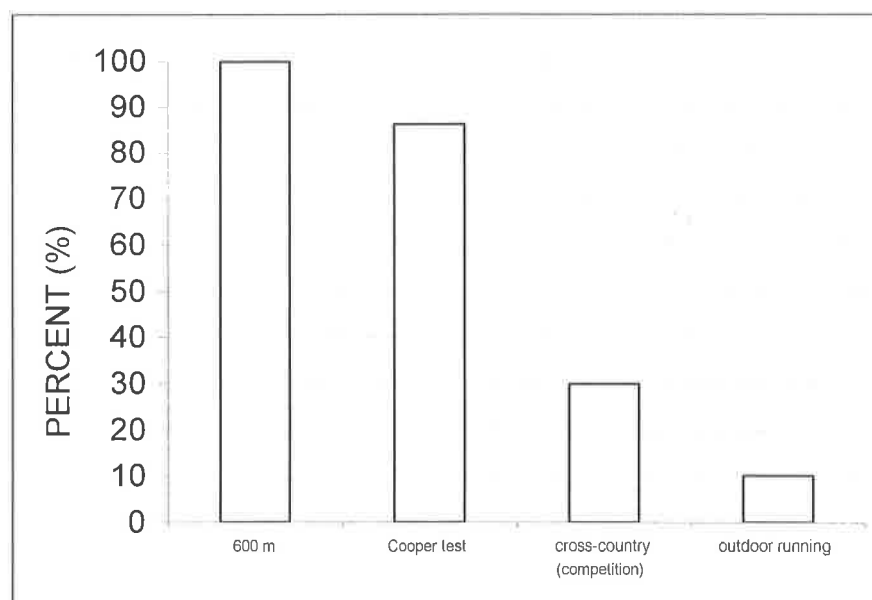
Running is not popular among the young in Slovenia. The most frequent answers to the question why running is not popular among the young are as follows: 32.4 % of the freshmen are of the opinion that running is unpopular due to too large an amount of exertion which must be endured during running; 15 % of them are of the opinion that the reason lies in their laziness; 9.8 % do not see any sense in running; poor shape is the reason that running is unpopular with 8.7 % of the young, while monotony is the reason in 8.1% of them; competitions with measurement of time represent a negative factor for 5.8 % of the young, and 14.5 % stated other reasons for its unpopularity (e.g. boredom, inadequate hygienic conditions, inadequate motivation).

On the basis of the calculation of the χ^2 - test value we tried to find the relations between the attitude towards endurance running and the factors which have an influence on the mentioned attitude of the young towards running. The attitude of the young towards running at school is associated with the training environment ($p(\chi^2)=0.032$), with the personal example of the physical or sports educator (secondary school $p(\chi^2)=0.001$), while the relation with the personal example of the physical educator at primary school is on the verge of statistical significance ($p(\chi^2)=.099$). The attitude of the young is also statistically significantly related to the efforts of the physical educator at secondary school ($p(\chi^2)=.011$) - at primary school the said relation is on the verge of statistical significance ($p(\chi^2)=.060$) - and the communication of theoretical information on the positive import of running at secondary school ($p(\chi^2)=.009$), and the communication of the theoretical contents on the functioning of the heart, fitness training and similar ($p(\chi^2)=.017$). The relation between the attitude of the young and the systematic inclusion of running practice into the process of physical education is on the verge of statistical significance both at secondary ($p(\chi^2)=.060$) and at primary school level ($p(\chi^2)=.080$). The relation between the attitude and the preparation before tests of running abilities ($p(\chi^2)=.090$) is also on the verge of statistical significance.

Discussion proposals for improvement

Exertion and endurance running. In physical education, the young most often encounter only the competition forms of endurance running (competitions in running over 600 m, cross-country and the Cooper test - Figure 1).

Figure 1: Which forms of endurance running did you become acquainted with during physical education classes (generation 96/97)?



Competitions in running over these distances cause pronounced functional and biochemical changes in the organism of students (Åstrand and Rodahl, 1986; Rowland, 1996). The intensity of the metabolic processes increases strongly, also of the glycolytic ones; the acid-base relationship is disrupted. Acidosis and other factors cause severe subjective feelings of fatigue (pain, nausea, etc.). The subjective feelings of fatigue are even greater if the pupils are not physically and psychologically prepared for them. It is worrying that 24.8 % of the respondents at primary school did not at all prepare for the test of running abilities; approximately 50 % of the further surveyed subjects did not sufficiently prepare for the run. The situation was practically the same at the secondary school level.

Frequent competitions or tests in endurance running (according to athletic rules: with the measurement of time, ranking, etc.), especially when not preceded by adequate preparation (physical, psychological and tactical), cause

aversion to running in the young. The young become afraid of the associated exertion and therefore begin to avoid running.

Competition running also does not have much in common with the positive biological health related effects on the organism which are otherwise ascribed to the long-duration, i.e. endurance running. The competition forms of endurance running at school will be

reasonable and efficient only as a conclusion of a longer lasting process of preparations involving various running contents. The results (Figure 1) show that there are very few of those who become acquainted with the long-duration running in nature within physical education classes.

From the educational aspect it would therefore be sensible to replace the strenuous competitions in endurance running with a relaxed, yet longer lasting running in nature, and with the play forms of running, while the testing of endurance abilities should be carried out in such a way that the pupil would compete with himself/herself. The monitoring and evaluation of the progress (a larger amount of running, smaller effort - lower heart rate heart beat during running, etc.) in the situation where everybody can be the winner should become the main motive of running training.

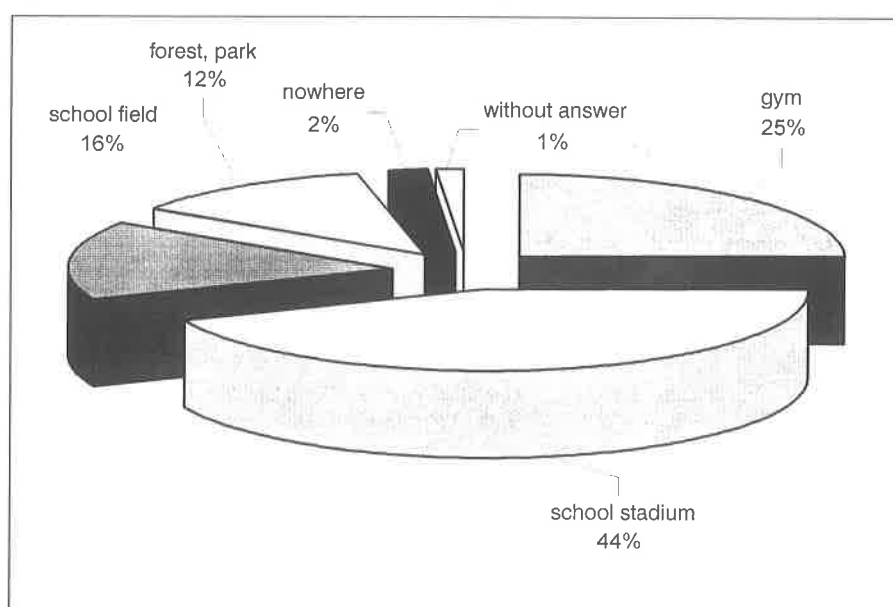
Monotony of endurance training. In breaking the monotony and other psychological barriers

in the young associated with endurance running the selection of the training environment has - in addition to other pedagogical procedures to be described later - an important role. We have established a relation between the attitude towards running and the environment in which the young performed running training within the framework of physical education ($p(\chi^2)=0.032$).

important relation between the attitude of the young towards running and the personal example of the physical educator.

The active relationship of the physical educator to running and other aerobic endurance contents is in all probability his/her most important lever in enthusing the young for running. It cannot be expected that a physical educator will enthuse the young for running only by counting their laps when they run past him. Without a drop of sweat of the

Figure 2: Where did you most often run within physical education classes at school (generation 96/97)?



Running training that is always performed in the same environment, above all running in a less suitable environment, such as in a gym, on the athletic track or school sports ground (Figure 2), leads to weariness, satiety and aversion of the young to such training. It is likely that an interesting training environment and its occasional change can help to better motivate the young to run. Endurance running and other aerobic sport activities belong without doubt in nature. How to enjoy and accept nature must be learned by a young person. The help of a physical educator is here of a paramount importance. Nature in the heart of a young person is the best investment for a healthy life.

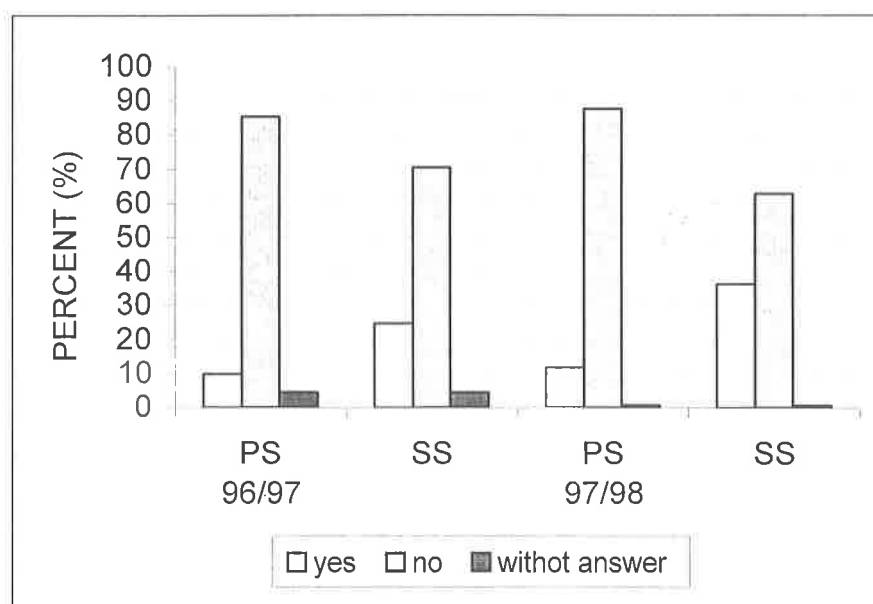
Motivational strategies of the physical educator. A detailed insight into the factors associated with the attitude towards endurance running points to a statistically

physical educator, the T-shirts of the pupils will also remain dry. Only 19 % of physical educators in primary school and 22% of physical educators in secondary school at least occasionally run with their pupils. A good example is even more important when working with children of the younger age categories. The development of perseverance, as one of the basic components of endurance in children, requires a lot of encouragement, kind words, explanations, etc. Not before or after running. The most efficient encouragements are those during running. Therefore, the teacher who runs with his/her pupils will not only be a good example imitated by the young, but it is the instructions, given by a physical educator concerning adequate speed of running, correct breathing technique, warnings and corrections of errors in the running technique, encouragements, exploring nature and other explanations, that will have the largest effect.

The educational influences based on the formation of firm internal motivational factors are without doubt the more important and lasting ones (Tušak, 1997). The spreading of knowledge of the healthy way of living and sports builds and strengthens the foundations of internal motivation, and is therefore an important task of the physical educator. Pedagogical work in lower classes of primary

be concluded that in the motivational procedures in preparation for running, the physical educators as a rule do not employ the raising of awareness of the young by expanding their knowledge with theoretical information related to endurance training (only between 25 and 30 % try to improve the attitude of the young towards running in this way as well).

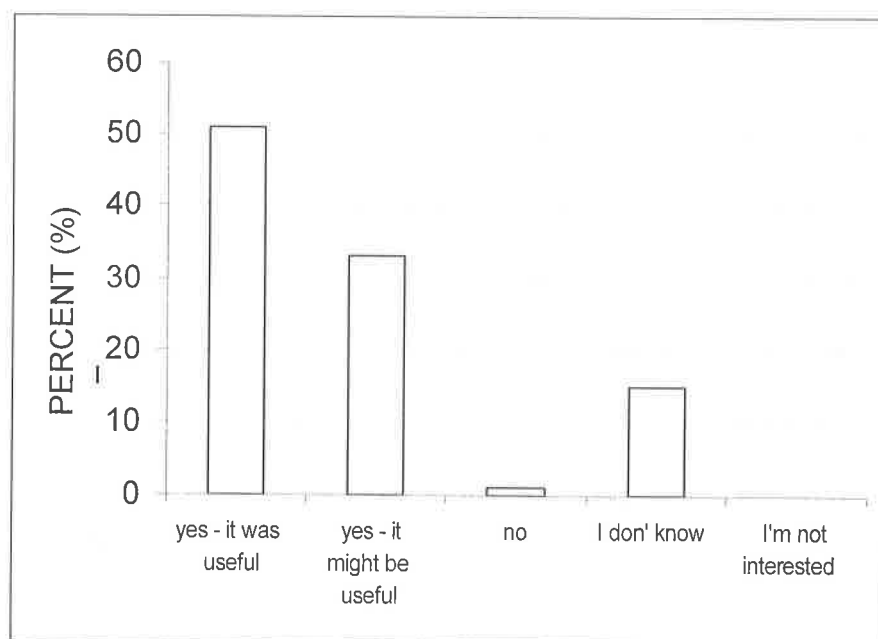
Figure 3: Did you discuss any of the theoretical contents (function of the heart, fitness preparation,...)?



schools is based to a large extent on emotional acceptance and imitation (Žlebnik, 1963). With the changes in the emotional and personality development that occur in puberty, the teacher must also include in his or her work other mechanisms which influence, encourage and strengthen a conscious attitude of the young towards individual sports contents. This in particular applies to sports contents that are, from the aspect of energy, more demanding, for example, endurance running. In the last years of primary school education and at secondary school level, the motivational procedures of the teacher must, in addition to the above described, be also based on raising awareness and education (Luepker, 1999; Haywood, 1991; Žlebnik, 1963). With respect to the answers of the respondents (Figure 3) it may

By means of an accurate presentation of the goals, contents and forms of the running programme to pupils before the beginning of training, which is to be enriched with various educational and awareness-raising materials (texts and graphic presentations about a healthy way of living, the effects and characteristics of efficacious sports training, healthy food, etc.) posted on school notice boards, walls of the gym, etc., the physical educators at school are likely to create a climate which will have a more positive effect on the active relationship of the young to endurance activities in nature and a healthy lifestyle in general, and that is what the young at school also expect from physical educators (Figure 4).

Figure 4: Do you think that interesting theoretical sporting contents could have a positive effect on your attitude towards endurance running?



Conclusion

The development of a positive attitude towards physical and psychological efforts, perseverance and not giving in when feeling uncomfortable are some of the most important educational values and therefore an extremely important task of physical education. Owing to this, education for a healthy way of living cannot be imagined without running or some other aerobic endurance activities in nature.

According to results of our study, it is possible to improve the attitude of the young to running exercise and other aerobic activities with implementing some simple pedagogical rules:

- to replace the strenuous competitions in endurance running with a relaxed, yet longer lasting running in nature, and with the play forms of running,
- the testing of endurance abilities should be carried out in such a way that the pupil would compete with himself/herself. The monitoring and evaluation of the progress in the situation where everybody can be the winner should become the main motive of running training,
- endurance running and other aerobic sport activities belong in nature,
- the awareness and spreading of the knowledge of a healthy way of living and sports build and strengthen the foundations of internal motivation,
- the active relationship of a physical educator to running (his or her personal example) is in all probability his/her most important lever in enthusing the young for running.

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